



Docket No.: SON-2828
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Hideo Tomita

Application No.: 10/689,707

Confirmation No.: 4649

Filed: October 22, 2003

Art Unit: 2851

For: IMAGE DISPLAY APPARATUS AND IMAGE
DISPLAY METHOD

Examiner: R. A. J. Blackman

APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

As required under § 41.37(a), this brief is filed within two months of the Notice of Appeal filed in this case on April 13, 2005, and is in furtherance of said Notice of Appeal.

The fees required under § 41.20(b)(2) are dealt with in the accompanying
TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R.
§ 41.37 and M.P.E.P. § 1206:

- | | |
|------------|---|
| I. | Real Party In Interest |
| II | Related Appeals and Interferences |
| III. | Status of Claims |
| IV. | Status of Amendments |
| V. | Summary of Claimed Subject Matter |
| VI. | Grounds of Rejection to be Reviewed on Appeal |
| VII. | Argument |
| VIII. | Claims |
| IX. | Evidence |
| X. | Related Proceedings |
| Appendix A | Claims |

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I. REAL PARTY IN INTEREST

The real party in interest for this appeal is Sony Corporation of Tokyo, Japan (“Sony”). An assignment of all rights in the present application to Tomita was executed by the inventor and recorded by the U.S. Patent and Trademark Office on reel 015873 at frame 0799.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings that will directly affect or be directly affected by or have a bearing on the Board’s decision in this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 6 claims pending in application.

B. Current Status of Claims

1. Claims canceled: 2 and 5
2. Claims withdrawn from consideration but not canceled: None
3. Claims pending: 1, 3, 4, and 6-8
4. Claims allowed: None
5. Claims rejected: 1, 3, 4, and 6-8

C. Claims On Appeal

The claims on appeal are claims 1, 3, 4, and 6-8.

IV. STATUS OF AMENDMENTS

On October 8, 2004 and in response to the non-final Office Action dated July 13, 2004 (Paper No./Mail Date 20040701), Appellant filed an Amendment in which claims 2 and 5 were canceled without prejudice, claims 1, 3, 4, 6, and 7 were amended, and claim 8 was added. Appellant did not file an Amendment After Final Rejection. In response to Appellant’s

amendment, the U.S. Patent and Trademark Office (USPTO) finally rejected claims 1, 3, 4, and 6-8 in a final Office Action dated December 29, 2004 (Paper No./Mail Date 20041201).

Appellant filed an Amendment After Final on February 8, 2005 in which claims 1 and 7 were amended. In response to Appellant's Amendment After Final, the USPTO issued an Advisory Action dated February 24, 2005 (Paper No./Mail Date 20050215) indicating that Appellant's amendment to claims 1 and 7 would not be entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 recites an image display apparatus, comprising first image light generation means for generating image lights individually corresponding to a plurality of color components, which form a single first color component group (page 50, lines 1-4; Fig. 13, element 71); and display image light generation means for synthesizing the image lights of the individual color components generated by said first image light generation means to generate a first display image light (page 49, lines 11-19; Fig. 13, elements 11-14); said first image light generation means setting color component values of the individual color components, of the first color component group, so that the first display image light may be generated with a chromaticity point and a luminance equal to those of a second display image light (page 13, lines 10-23) wherein the second display image light includes synthesized image lights individually corresponding to color components of a second color component group whose color components in combination are different from those of the first color component group, and wherein said first image light generation means generates image lights individually corresponding to the color components, of the first color component group based on the set color component values (page 12, lines 21-24; page 13, lines 1-23); second image light generation means for generating image lights individually corresponding to the color components, which form said second color component group (page 51, lines 1-6; Fig. 13, element 72); said display image light generation means for synthesizing the image lights of the individual color components generated by said second image light generation means to generate the single second display image light (page 49, lines 11-19; Fig. 13, elements 11A-14A); and switching means for switching the image lights to be synthesized by said display image light generation means between the image lights generated by said first image light generation means and the image lights generated by said second image light generation means based on data provided through a predetermined image pattern input to

said switching means (page 52, lines 9-17; Fig. 13, elements 73 and 74).

Claim 4 recites an image display method, comprising a first image light generation step of generating image lights individually corresponding to a plurality of color components, which form a first color component group (page 50, lines 1-4; Fig. 13, element 71); and a display image light generation step of synthesizing the image lights of the individual color components generated by the first image light generation step to generate a single first display image light (page 49, lines 11-19; Fig. 13, elements 11-14); the first image light generation step setting color component values of the individual color components, which form the first color component group, so that the first display image light may be generated with a chromaticity point and a luminance equal to those of a second display image light to be generated by synthesizing image lights individually corresponding to color components of a second color component group whose color components in combination are different from those of the first color component group, the first image light generation step generating image lights individually corresponding to the color components, which form the first color component group, based on the set color component values (page 12, lines 21-24; page 13, lines 1-23); a second image light generation step generating image lights individually corresponding to the color components, which form the second color component group (page 51, lines 1-6; Fig. 13, element 72); the display image light generation step synthesizing the image lights of the individual color components generated by the second image light generation step to generate the single second display image light (page 49, lines 11-19; Fig. 13, elements 11A-14A); and a switching step of switching the image lights to be synthesized by the display image light generation step between the image lights generated by the first image light generation step and the image lights generated by the second image light generation step based on data provided through a predetermined image pattern input to said switching means (page 52, lines 9-17; Fig. 13, elements 73 and 74).

Claim 7 recites an image display apparatus, comprising first image light generator that generates image lights individually corresponding to a plurality of color components, which form a single first color component group (page 50, lines 1-4; Fig. 13, element 71); and display image light generator that synthesizes the image lights of the individual color components generated by said first image light generator to generate a first display image light (page 49, lines 11-19; Fig. 13, elements 11-14); said first image light generator setting color component values of the individual color components, which form the first color component group, so that the first display image light may be generated with a chromaticity point and a luminance equal to

those of a second display image light to be generated by synthesizing image lights individually corresponding to color components of a second color component group whose color components in combination are different from those of the first color component group, said first image light generator generating image lights individually corresponding to the color components, which form the first color component group, based on the set color component values a second image light generator that generates image lights individually corresponding to a plurality of color components, which form said second color component group (page 12, lines 21-24; page 13, lines 1-23); the display image light generator that synthesizes the image lights of the individual color components generated by the second image light generator to generate the single second display image light (page 49, lines 11-19; Fig. 13, elements 11A-14A); and a switch that switches the image lights to be synthesized by the display image light generation step between the image lights generated by the first image light generator and the image lights generated by the second image light generator based on data provided through a predetermined image pattern input to said switch (page 52, lines 9-17; Fig. 13, elements 73 and 74).

In summary, claims 1, 4, and 7 recite an image display apparatus and method having first and second light generators. The first light generator generates synthesized light of a first color group and the second light generator generates synthesized light of a second color group, where the first and second color groups are not the same. A predetermined image pattern is input to a switch. The switch then displays light generated by either the first or second light generator based on the input image pattern.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether the final rejection of claims 1-8 under 35 U.S.C. §102(e) as anticipated by *Struyk*, U.S. Patent Application Publication No. 2003/0118183 should be sustained.

VII. ARGUMENT

As a preliminary matter, Appellant notes that in the Amendment in Response to Non-Final Office Action filed on October 8, 2004, claims 2 and 5 were canceled without prejudice. The final rejection issued by the USPTO, however, indicates that claims 1-8 were rejected under §102 as anticipated by *Struyk*. Because claims 2 and 5 were no longer pending in the instant application when the final Office Action issued, Appellant respectfully submits that only the rejection of claims 1, 3, 4, and 6-8 will be addressed below.

Claim 1 recites an image display apparatus, comprising first image light generation

means for generating image lights individually corresponding to a plurality of color components, which form a single first color component group; and display image light generation means for synthesizing the image lights of the individual color components generated by said first image light generation means to generate a first display image light; said first image light generation means setting color component values of the individual color components of the first color component group, so that the first display image light may be generated with a chromaticity point and a luminance equal to those of a second display image light, wherein the second display image light includes synthesized image lights individually corresponding to color components of a second color component group whose color components in combination are different from those of the first color component group, and wherein said first image light generation means generates image lights individually corresponding to the color components, of the first color component group based on the set color component values; second image light generation means for generating image lights individually corresponding to the color components, which form said second color component group; said display image light generation means synthesizing the image lights of the individual color components generated by said second image light generation means to generate the single second display image light; and switching means for switching the image lights to be synthesized by said display image light generation means between the image lights generated by said first image light generation means and the image lights generated by said second image light generation means based on data provided through a predetermined image pattern input to said switching means.

Claim 4 recites an image display method, comprising a first image light generation step of generating image lights individually corresponding to a plurality of color components, which form a first color component group; and a display image light generation step of synthesizing the image lights of the individual color components generated by the first image light generation step to generate a single first display image light; the first image light generation step setting color component values of the individual color components, which form the first color component group, so that the first display image light may be generated with a chromaticity point and a luminance equal to those of a second display image light to be generated by synthesizing image lights individually corresponding to color components of a second color component group whose color components in combination are different from those of the first color component group, the first image light generation step generating image lights individually corresponding to the color components, which form the first color component group based on

the set color component values; a second image light generation step generating image lights individually corresponding to the color components, which form the second color component group; the display image light generation step synthesizing the image lights of the individual color components generated by the second image light generation step to generate the single second display image light; and a switching step of switching the image lights to be synthesized by the display image light generation step between the image lights generated by the first image light generation step and the image lights generated by the second image light generation step based on data provided through a predetermined image pattern input to said switching means.

Claim 7 recites an image display apparatus, comprising first image light generator that generates image lights individually corresponding to a plurality of color components, which form a single first color component group; and display image light generator that synthesizes the image lights of the individual color components generated by said first image light generator to generate a first display image light; said first image light generator setting color component values of the individual color components, which form the first color component group, so that the first display image light may be generated with a chromaticity point and a luminance equal to those of a second display image light to be generated by synthesizing image lights individually corresponding to color components of a second color component group whose color components in combination are different from those of the first color component group, said first image light generator generating image lights individually corresponding to the color components, which form the first color component group based on the set color component values; a second image light generator that generates image lights individually corresponding to a plurality of color components, which form said second color component group; the display image light generator synthesizes said image lights of the individual color components generated by the second image light generator to generate the single second display image light; and a switch that switches the image lights to be synthesized by the display image light generator between the image lights generated by the first image light generator and the image lights generated by the second image light generator based on data provided through a predetermined image pattern input to said switch.

In summary, claims 1, 4, and 7 recite an image display apparatus and method having first and second light generators. The first light generator generates synthesized light of a first color group and the second light generator generates synthesized light of a second color group, where the first and second color groups are not the same. A predetermined image pattern is input to a

switch. The switch then displays light generated by either the first or second light generator based on the input image pattern.

Struyk discloses an image altering apparatus having an image signal generator 1 that generates a fundamental image signal. A video display 3 displays the fundamental image signal generated by the image signal generator 1. The fundamental image signal includes red, green, and blue color data components that are output from the image signal generator 1 on lines 5, 7, and 9, respectively. Before being displayed on the video display 3 the signals 5, 7, and 9 output by the image signal generator 1 are input to a signal modifying means 11. The signal modifying means 11 includes an A/D converter (27, 45, and 53), a digital signal processor (31, 47, 55), a D/A converter (35, 49, 57), and a buffer (43, 51, 59) on each of the respective signal lines 5, 7, and 9. The A/D converter samples and converts the corresponding fundamental color to a digital representation. The digital color value is input to the digital signal processor and either passes or inverts the digital color value based on a signal received from a sync control mechanism 13. The D/A converter receives either the fundamental or inverted color signal from the digital signal processor and converts the digital color value into an analog color signal and outputs the analog color signal to a corresponding buffer. The buffer holds the associated color signal and outputs the signal to the video display 3 where the color signals are multiplexed and displayed. *Struyk*, however, fails to disclose, teach, or suggest at that said first image light generation means setting color component values of the individual color components of the first color component group, so that the first display image light may be generated with a chromaticity point and a luminance equal to those of a second display image light, as recited in claims 1, 4, and 7. In fact, *Struyk* fails to provide a discussion on the setting of color components based on a chromaticity point and luminance. At best, *Struyk* discloses processing a fundamental image to produce its true inverse so that all individual color components are appropriately determined so that the color components of the resulting compound image have the same intensity at all pixel locations (see pgph [0047]).

To properly anticipate a claim, the document must disclose, explicitly or implicitly, each and every feature recited in the claim. See Verdegall Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). *Struyk* fails to disclose, teach, or suggest every element recited in independent claims 1, 4, and 7, therefore these claims are not anticipated by *Struyk*. Accordingly, Applicant respectfully requests that the rejection of claims 1, 4, and 7 under 35 U.S.C. §102 not be sustained.

Claim 3 depends from claim 1, claim 6 depends from claim 4, and claim 8 depends from claim 7. By virtue of this dependency, Applicant submits that claims 3, 6, and 8 are allowable for at least the same reasons given above with respect to claims 1, 4, and 7, respectively. In addition, Applicant submits that claims 3, 6, and 8 are further distinguished over *Struyk* by the additional elements recited therein, and particularly with respect to each claimed combination. Applicant respectfully requests, therefore, that the rejection of claims 3, 6, and 8 under 35 U.S.C. §102 not be sustained.

VIII. CLAIMS

A copy of the claims involved in the present appeal is attached hereto as Appendix A. As indicated above, the claims in Appendix A do include the amendments filed by Appellant on October 8, 2004.

IX. EVIDENCE

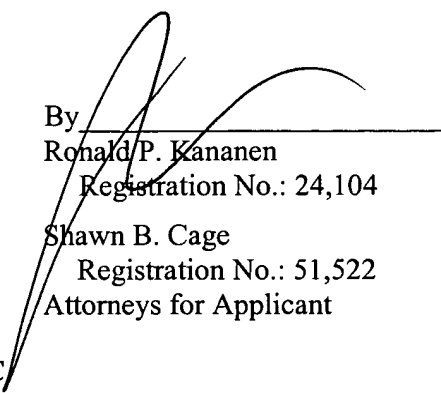
No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

X. RELATED PROCEEDINGS

No related proceedings are referenced in II. above, or copies of decisions in related proceedings are not provided, hence no Appendix is included.

Dated: June 13, 2005

Respectfully submitted,

By 
Ronald P. Kananen
Registration No.: 24,104
Shawn B. Cage
Registration No.: 51,522
Attorneys for Applicant

RADER, FISHMAN & GRAUER, PLLC

Lion Building
1233 20th Street, N.W., Suite 501
Washington, D.C. 20036
Tel: (202) 955-3750
Fax: (202) 955-3751
Customer No. 23353

DC197257

APPENDIX A

Claims Involved in the Appeal of Application Serial No. 10/689,707

1. (PREVIOUSLY PRESENTED) An image display apparatus,
comprising:
first image light generation means for generating image lights individually
corresponding to a plurality of color components, which form a single first color component
group; and
display image light generation means for synthesizing the image lights of the
individual color components generated by said first image light generation means to generate a
first display image light;
said first image light generation means setting color component values of the
individual color components, of the first color component group, so that the first display image
light may be generated with a chromaticity point and a luminance equal to those of a second
display image light, wherein the second display image light includes synthesized image lights
individually corresponding to color components of a second color component group whose color
components in combination are different from those of the first color component group, and
wherein said first image light generation means generates image lights individually
corresponding to the color components, of the first color component group based on the set color
component values;
second image light generation means for generating image lights individually
corresponding to the color components, which form said second color component group;
said display image light generation means for synthesizing the image lights of the
individual color components generated by said second image light generation means to generate
the single second display image light; and
switching means for switching the image lights to be synthesized by said display
image light generation means between the image lights generated by said first image light
generation means and the image lights generated by said second image light generation means
based on data provided through a predetermined image pattern input to said switching means.
2. (CANCELED).
3. (PREVIOUSLY PRESENTED) The image display apparatus

according to claim 1, wherein said switching means performs the switching in appropriate timing so that the predetermined image pattern formed by image lights of said first color component group is embedded in an image formed from image lights of said second color component group.

4. (PREVIOUSLY PRESENTED) An image display method, comprising:
- a first image light generation step of generating image lights individually corresponding to a plurality of color components, which form a first color component group; and
 - a display image light generation step of synthesizing the image lights of the individual color components generated by the first image light generation step to generate a single first display image light;
 - the first image light generation step setting color component values of the individual color components, which form the first color component group, so that the first display image light may be generated with a chromaticity point and a luminance equal to those of a second display image light to be generated by synthesizing image lights individually corresponding to color components of a second color component group whose color components in combination are different from those of the first color component group, the first image light generation step generating image lights individually corresponding to the color components, which form the first color component group based on the set color component values;
 - a second image light generation step generating image lights individually corresponding to the color components, which form the second color component group;
 - the display image light generation step synthesizing the image lights of the individual color components generated by the second image light generation step to generate the single second display image light; and
 - a switching step of switching the image lights to be synthesized by the display image light generation step between the image lights generated by the first image light generation step and the image lights generated by the second image light generation step based on data provided through a predetermined image pattern input to said switching means.

5. (CANCELED).

6. (ORIGINAL) The image display method according to ~~claim 5~~claim 4, wherein the switching step performs the switching at the required timing so that a variation according to a predetermined form is provided to a portion of the image formed with the first display image light.

7. (PREVIOUSLY PRESENTED) An image display apparatus, comprising:

first image light generator that generates image lights individually corresponding to a plurality of color components, which form a single first color component group; and

display image light generator that synthesizes the image lights of the individual color components generated by said first image light generator to generate a first display image light;

said first image light generator setting color component values of the individual color components, which form the first color component group, so that the first display image light may be generated with a chromaticity point and a luminance equal to those of a second display image light to be generated by synthesizing image lights individually corresponding to color components of a second color component group whose color components in combination are different from those of the first color component group, said first image light generator generating image lights individually corresponding to the color components, which form the first color component group based on the set color component values

a second image light generator that generates image lights individually corresponding to a plurality of color components, which form said second color component group;

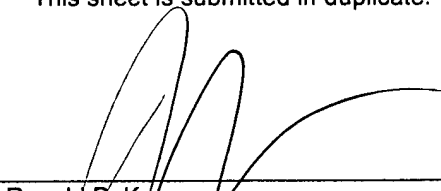
the display image light generator that synthesizes the image lights of the individual color components generated by the second image light generator to generate the single second display image light; and

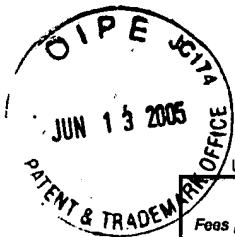
a switch that switches the image lights to be synthesized by the display image light generation step between the image lights generated by the first image light generator and the image lights generated by the second image light generator based on data provided through a predetermined image pattern input to said switch.

8. (PREVIOUSLY PRESENTED) The image display apparatus of claim 7, wherein said switch performs the switching at an appropriate time so that the predetermined image pattern formed by image lights of said first color component group is embedded in an image formed from image lights of said second color component group.



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TRANSMITTAL OF APPEAL BRIEF			Docket No. SON-2828
In re Application of: Hideo Tomita			
Application No. 10/689,707-Conf. #4649	Filing Date October 22, 2003	Examiner R. A. J. Blackman	Group Art Unit 2851
Invention: IMAGE DISPLAY APPARATUS AND IMAGE DISPLAY METHOD			
<p style="text-align: center;"><u>TO THE COMMISSIONER OF PATENTS:</u></p> <p>Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed: <u>April 13, 2005</u></p> <p>The fee for filing this Appeal Brief is <u>\$ 500.00</u></p> <p><input checked="" type="checkbox"/> Large Entity <input type="checkbox"/> Small Entity</p> <p><input type="checkbox"/> A petition for extension of time is also enclosed.</p> <p>The fee for the extension of time is _____</p> <p><input type="checkbox"/> A check in the amount of _____ is enclosed.</p> <p><input checked="" type="checkbox"/> Charge the amount of the fee to Deposit Account No. <u>18-0013</u> This sheet is submitted in duplicate.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input checked="" type="checkbox"/> The Director is hereby authorized to charge any additional fees that may be required or credit any overpayment to Deposit Account No. <u>18-0013</u> This sheet is submitted in duplicate.</p> <div style="display: flex; justify-content: space-between; align-items: flex-end;"><div style="width: 60%;"> _____ Ronald P. Kahaner Attorney Reg. No. : 24,104 RADER, FISHMAN & GRAUER PLLC 1233 20th Street, N.W. Suite 501 Washington, DC 20036 (202) 955-3750</div><div style="width: 35%; text-align: right;">Dated: <u>June 13, 2005</u></div></div>			



PTO/SB/17 (12-04v2)

Approved for use through 7/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number.

Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).**FEE TRANSMITTAL**
For FY 2005☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$)
500.00**Complete if Known**

Application Number	10/689,707-Conf. #4649
Filing Date	October 22, 2003
First Named Inventor	Hideo Tomita
Examiner Name	R. A. J. Blackman
Art Unit	2851
Attorney Docket No.	SON-2828

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☒ Deposit Account Deposit Account Number: **18-0013** Deposit Account Name: **Rader, Fishman & Grauer PLLC**

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee

☐ Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

FEE CALCULATION**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

<u>Total Claims</u>	<u>Extra Claims</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>	<u>Multiple Dependent Claims</u>
_____	_____	_____	_____	<u>Fee (\$)</u> <u>Fee Paid (\$)</u>
_____ = _____ x _____ = _____				
<u>Indep. Claims</u>	<u>Extra Claims</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>	
_____	_____	_____	_____	
_____ = _____ x _____ = _____				

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

<u>Total Sheets</u>	<u>Extra Sheets</u>	<u>Number of each additional 50 or fraction thereof</u>	<u>Fee (\$)</u>	<u>Fee Paid (\$)</u>
_____	_____	_____	_____	_____
_____ - 100 = _____ / 50 _____ (round up to a whole number) x _____ = _____				

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): **1402 Filing a brief in support of an appeal** **500.00**

SUBMITTED BY			
Signature		Registration No. (Attorney/Agent)	24,104
Name (Print/Type)	Ronald P. Kananen	Telephone	(202) 955-3750
		Date	June 13, 2005

DC197419